AMENDMENTS TO THE SPECIFICATION

Please replace equation (3) in page 6 with the following equation:

RI

 $N \times (R1 \times R2)^{\frac{1}{2}} / \{2\Pi \times L1 \times (1 - k^2)^{\frac{1}{2}}\} \ge 20000$

Please replace equation (4) in page 6 with the following equation:

12

 $2\Pi \times f \times L1^{2} \times (N^{2} \times R2 + L1 \times R1) / (N^{2} \times X^{1/2}) \ge 0.3$ $X = (2\Pi \times f)^{2} \times (L1 \times R1 + L1 \times R1/N^{2})^{2} + \{-R1 \times R2 + (2\Pi \times f)^{2} \times L1^{2} \times (1-k^{2}) / N^{2}\}^{2}$

Please replace equation (6) in page 11 with the following equation:

 $N \times (R1 \times R2)^{\frac{1}{2}} / (2\Pi \times L1 \times (1-k^2)^{\frac{1}{2}}) \ge 20000$

Please replace equation (7) in page 12 with the following equation:

B4

 $2\Pi \times f \times L1^{2} \times (N^{2} \times R2 + L1 \times R1) / (N^{2} \times X^{\frac{1}{2}}) \ge 0.3$ $X = (2\Pi \times f)^{2} \times (L1 \times R1 + L1 \times R1/N^{2})^{2} + \{-R1 \times R2 + (2\Pi \times f)^{2} \times L1^{2} \times (1-k^{2}) / N^{2}\}^{2}$

Please replace equation (8) in page 13 with the following equation:

£5

Zin =
$$(R1 + A^2 \times R2) + j\omega (L1 - A^2 \times L2)$$

 $A^2 = \omega^2 \times M^2 / (\omega^2 \times L2^2 = R2^2)$
 $M^2 = K^2 \times L1 \times L2$

Please replace the equation in line 12 of page 13 with the following equation:

80

$$A^2 = \dot{M}^2 / L2^2 = k^2 \times L1 / L2$$

Please replace equation (9) in page 13 with the following equation:

87

$$Zin = (R1 + k^2 \times R2 \times L1 \times L2) + j\omega L1 (1-k^2)$$

Please replace equation (11) in page 14 with the following equation:

J)

I2 / V1 =
$$\omega$$
 • k (L1 x L2)^{1/2} / Y^{1/2}

Y = ω^2 x (L1 x R2 + L2 x R1)²

+ {-R1 x R2 + ω^2 x L1 x L2 x (1-k²)}²

Please replace equation (12) in page 14 with the

following equation:

89

 $= N \times (R1 \times R2)^{\frac{1}{2}} / \{2\Pi \times L1 \times (1-k^2)^{\frac{1}{2}} \}$

Please replace equation (15) in page 16 with the following equation:

B10

I2 / V1 = ω • k (L1 x L2)^{1/2} / Y^{1/2}

Y = ω^2 x (L1 x R2 + L2 x R1)²

+ {-R1 x R2 + ω^2 x L1 x L2 x (1-k²)}²

Please replace equation (16) in page 16 with the following equation:

8//

I2 / V1 (max) = k x (L1 x L2) $\frac{1}{2}$ / (L1 x R2 + L2 x R1)

Please replace the equations in lines 4 and 5 of the Abstract with the following formula:

A12

 $N \times (R1 \times R2)^{\frac{1}{2}} / \{2\Pi \times L1 \times (1 - k^2)^{\frac{1}{2}}\} \ge 20000$